

(B) adjusting said emulsion polymerization product to a pH in the range of about 4.0 to about 6.0 to produce the cationic acrylic colloidal dispersion polymer composition.

3. The cationic acrylic colloidal dispersion polymer composition of claim 1 wherein the amine-containing ethylenically unsaturated monomer is a member selected from the group consisting of dimethylaminoethyl acrylate, dimethylaminoethyl methacrylate, diethylaminoethyl methacrylate, t-butylaminoethyl methacrylate, dimethylaminopropyl methacrylamide, allylamine, 2-vinylpyridine, 4-vinylpyridine, and combinations thereof.

4. The cationic acrylic colloidal dispersion polymer composition of claim 1 wherein the ethylenically unsaturated monomer containing at least one quaternary ammonium group is a member selected from the group consisting of vinylbenzyltrimethylammonium chloride, methacryloyloxyethyltrimethylammonium chloride, methacrylamidopropyltrimethylammonium chloride, and combinations thereof.

5. The cationic acrylic colloidal dispersion polymer composition of claim 1 wherein the ethylenically unsaturated monomer containing at least one quaternary ammonium group is a member selected from the group consisting of hydroxyethyl acrylate, hydroxypropyl acrylate, hydroxybutyl acrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate, butanediol monovinyl ether, allyl alcohol, and combinations thereof.

6. The cationic acrylic colloidal dispersion polymer composition of claim 1 wherein the chain transfer agent is a member selected from the group consisting of dodecyl mercaptan, 2-mercaptoethanol, alkyl mercaptopropionates, mercaptoacetic acid, mercaptopropionic acid, octyl mercaptan, and combinations thereof.

7. The cationic acrylic colloidal dispersion polymer composition of claim 1 wherein the nonionic surfactant is a member selected from the group consisting of ethoxylated alkylphenols, ethoxylated fatty alcohols, ethylene oxide/propylene oxide block copolymers, and combinations thereof.

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8. The cationic acrylic colloidal dispersion polymer composition of claim 1 wherein the cationic surfactant is a member selected from the group consisting of alkyltrimethylammonium salts wherein the alkyl group contains from 8 to 22 carbon atoms and the counterion of the salt is a member selected from the group consisting of chloride, bromide, methylsulfate, and ethylsulfate; alkylbenzyltrimethylammonium salts wherein the alkyl group contains from 8 to 22 carbon atoms and the counterion of the salt is a member selected from the group consisting of chloride, bromide, methylsulfate, and ethylsulfate; alkylpyridinium salts wherein the alkyl group contains from 8 to 22 carbon atoms and the counterion of the salt is a member selected from the group consisting of chloride, bromide, methylsulfate, and ethylsulfate; and combinations thereof.

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9. The cationic acrylic colloidal dispersion polymer composition of claim 1 wherein the polymerization initiator comprises from about 0.1% to about 3.0% by total weight of the mixture and is a member selected from the group consisting of thermal initiators, redox initiators, and combinations thereof.

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10. The cationic acrylic colloidal dispersion polymer composition of claim 9 wherein the thermal initiator is a member selected from the group consisting of hydrogen peroxide, t-butyl hydroperoxide, di-t-butyl peroxide, benzoyl peroxide, benzoyl hydroperoxide, 2,4-dichlorobenzoyl peroxide, t-butyl peracetate, azobisisobutyronitrile, isopropyl peroxydicarbonate, and combinations thereof.

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11. The cationic acrylic colloidal dispersion polymer composition of claim 9 wherein the redox initiator is a member selected from the group consisting of cumene hydroperoxide-sodium metabisulfite, cumene hydroperoxide-iron (II) sulfate, and combinations thereof.

5 12. The cationic acrylic colloidal dispersion polymer composition of claim 1 wherein the pH of the emulsion polymerization product is adjusted via addition of an acid selected from the group consisting of mineral acids, water-soluble carboxylic acids, water-soluble sulfonic acids, and combinations thereof.

10 13. The cationic acrylic colloidal dispersion polymer composition of claim 12 wherein the acid is a member selected from the group consisting of acetic acid, propionic acid, glycolic acid, lactic acid, and combinations thereof.

15 14. An ink jet receptive coating comprising the cationic acrylic colloidal dispersion polymer composition of claim 1.

15 15. The ink jet receptive coating of claim 14 wherein the coating further comprises a pigment.

20 16. The ink jet receptive coating of claim 15 wherein the pigment is a member selected from the group consisting of silica, alumina, plastic pigments, calcium carbonate, kaolin clay, and combinations thereof.

25 17. An ink jet printable product comprising a substrate coated on at least one side with the coating of claim 14.

18. The ink jet printable product of claim 17 where the substrate is a member selected from the group consisting of paper, paperboard, wood, plastic film, metal foil, textiles, and combinations thereof.